

20 Inch Flat Panel LCD - TV



USER'S MANUAL

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1. SAFETY AND PRECAUTIONS

Please read through this section carefully and follow the instructions to maximize the reliable operation and lifetime of your LCD display. Always keep these instructions handy and close by your LCD display. Keep the instructions and the packaging so that if you sell or give away your LCD display you can give them to the new owner.

OPERATING SAFETY



- **Never open the housing** of the LCD display /power supply! When the housing is open there is a **danger of injury** from electric shock!

- Do not insert **any objects** through the slots and openings of the monitor. This may lead to an electrical short-circuit or even fire resulting in damage to your LCD display.



- Slots and openings in the LCD display are for ventilation purpose. **Do not cover these openings**, as this may lead to overheating.
- Do not allow **children** to play **unattended** with electrical equipment. Children may not always correctly recognize danger.
- This LCD display is intended for personal use only. It **not** intended for commercial use in a **heavy industry environment**.
- An **injury hazard** exists when the **display breaks**. Wear protective gloves to pack the broken parts and send them into your service center for proper **disposal**. Then wash your hands with soap, because it is possible for **chemicals** to escape.
- Never exert pressure on the display. This could break the monitor.
- Do not touch the display with your fingers or with sharp objects to avoid damage.

Contact the Call Center immediately in any of the following situations. Do NOT plug in or turn on your display:

- ◆ if the power cable/power supply overheats or is damaged
- ◆ if liquid has gotten into the monitor
- ◆ if the LCD display is dropped or the housing damaged

REPAIR

- Leave all repairs of your LCD display to **authorized and qualified personnel** only.
- Should a repair be necessary, please contact one of our authorized **service partners** only.

NOTES FOR SERVICE ENGINEERS

- Before opening the housing, **disconnect the product from all power sources and remove any connecting cables**. If the display has not been disconnected from the power outlet before being opened, there is a **danger to life** through electric shock. There is also a risk of damage to the components.
- Internal components of the LCD display may be damaged by **electrostatic discharge (ESD)**. Carry out repairs in an **ESD-protected workshop**. If no such workshop is available, wear an **antistatic wrist strap** or touch a highly conductive metal object. We can repair damage sustained by inappropriate handling for a fee.
- Use only **original spare parts**.

POINT OF USE

- Keep your LCD display and all units connected to it away from **moisture** and avoid **dust, heat** and **direct sunlight**. Failure to observe these instructions can lead to malfunctions or damage to the LCD display.
- Place and operate all units on **a stable, level** and **vibration-free surface** in order to avoid the LCD display from falling.

ENVIRONMENTAL CONDITIONS

- The LCD display can be operated most reliably at ambient temperatures between **+41°F** and **+95°F** (5° C to 35° C) and at a relative humidity between 20% and 85% (without condensation).
- When switched off, the monitor can be stored most reliably between **-4°F** and **+140°F** (-20° C - +60° C), up to the maximum height of 39,000 ft (12,000 m) above sea level at a relative humidity between 10% and 85% (without condensation).
- After transporting your LCD display please wait until it has assumed the ambient temperature before connecting and switching it on. Extremely high variations in the temperature or humidity may result in **condensation** forming on the inside of the LCD display which could cause an **electrical short-circuit**.

CONNECTING

Observe the following instructions to connect your LCD display properly:

POWER SUPPLY



- Do not open the power supply housing. An open housing presents a **lethal hazard** from electrical shock. There are no parts inside to be cleaned or serviced.
- Operate your LCD display only with grounded outlets with **AC 100-230V~/ 50 Hz**. If you are not sure about the power supply at your location, check with your power company.
- Use only the power supply and power connection cable **provided**.
- For additional safety we recommend use of **a surge protector** to protect your LCD display from damage resulting from **voltage surges** or **lightning**.
- To remove the LCD display from the power supply, disconnect the plug from the AC outlet.
- The power **outlet** must be in the vicinity of your LCD display and within reach of the power cables. **DO NOT stretch the power cables tightly to reach a power outlet**.
- You should arrange the LCD display cables in a manner that no one can trip over or step on them.
- To avoid damage of cable **do not place any objects or furniture on the cable**.

STANDARDS/ELECTRO-MAGNETIC COMPATIBILITY

Your display fulfils the requirements for electro-magnetic compatibility and electrical safety specified in the following standards:

**EN 55013, EN 55020, EN 60065
EN 61000-3-2, EN 61000-3-3**

- When connecting ensure that *Guidelines for Electro-Magnetic Compatibility (EMC)* are observed.
- Provide a space of at least three feet from **high-frequency and magnetic sources of interference** (television sets, loudspeakers, mobile telephones, etc.) in order to avoid malfunctions.

ERGONOMICS

- For ergonomic reasons we suggest not to use dark text with a blue background. This would cause bad readability and would increase eye strain.
- While working with display you should **take breaks periodically** to avoid tension and fatigue.
- In order to protect your eyes and to create a pleasant working area you should **avoid glare, reflections** and **strong contrasts** on the screen.

TRANSPORT AND RECYCLING

- Keep the original packaging and use it to protect the LCD display during transport or storage.

PRECAUTIONS

⇒ **Caution!** There are **no parts which can be serviced** or cleaned inside of the monitor housing.

You can increase the life of your LCD display by taking the following precautions:

- Before cleaning **always disconnect the power line** and all connection cables.
- Do **not use any solvents**, caustic or gaseous cleaning agents.
- Clean the display with a soft, lint-free cloth.
- Ensure that no water droplets remain on the screen. Water can cause **permanent discoloration**.
- Do not expose the screen to **bright sunlight** or **ultraviolet radiation**.

IMPORTANT ADDITIONAL SAFETY INSTRUCTIONS

When using any electronic equipment, basic safety precautions should always be taken. Following the guidelines below can reduce the risk of fire, electric shock and injury to person:

- Do not use this product near water (e.g., near a bathtub, wash bowl, kitchen sink or laundry tub, in a wet basement or near a swimming pool).
- Avoid using a telephone/modem (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lightning.
- Do not use the telephone/modem to report a gas leak in the vicinity of the leak.
- Use only the power cord indicated in this manual. Do not dispose of batteries in a fire. They may explode. Check with local codes for possible special disposal instructions.
- Keep batteries away from children at all times.

FCC COMPLIANCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced technician for help.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. Shielded interface cables, if any, must be used in order to comply with the emission limits.

2. INTRODUCTION

Thank you for purchasing our LCD Multi-display. We thank you for your confidence in our products and are pleased to greet you as a new customer.

We focused on great features, ease of use and reliability in manufacturing your LCD display.

SERVICE

Service and support will be available every time you use your new monitor. Contact us, we will be glad to help you.

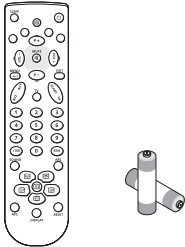
This manual contains a separate chapter on the subject of Troubleshooting on page 37.

PERFORMANCE CHARACTERISTICS

- The terminals include Tuner receiving terminal, SCART (Video, S-Video & RGB), Video, Componente (YPbPR) and S-Video.
- Easy-to-use remote control.
- Easy-to-use on-screen menu system.
- Screen format setting by pressing ARC button.
- Headphone socket for private listening.
- Built-in, broadband speakers.
- A sleep timer.
- Child Lock function.
- Full function Teletext.

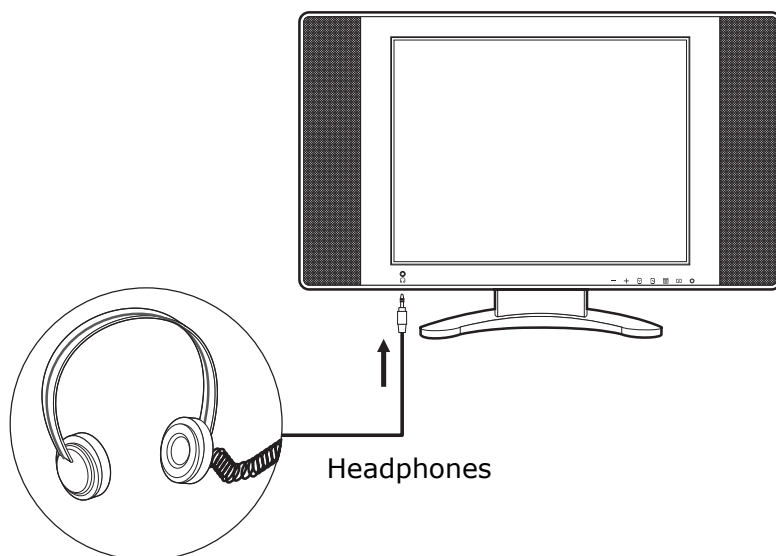
INCLUDED EQUIPMENT

Please make sure the following items are included with your LCD Display. Notify us within 14 days after purchase if it is not complete. With you LCD Display you receive:

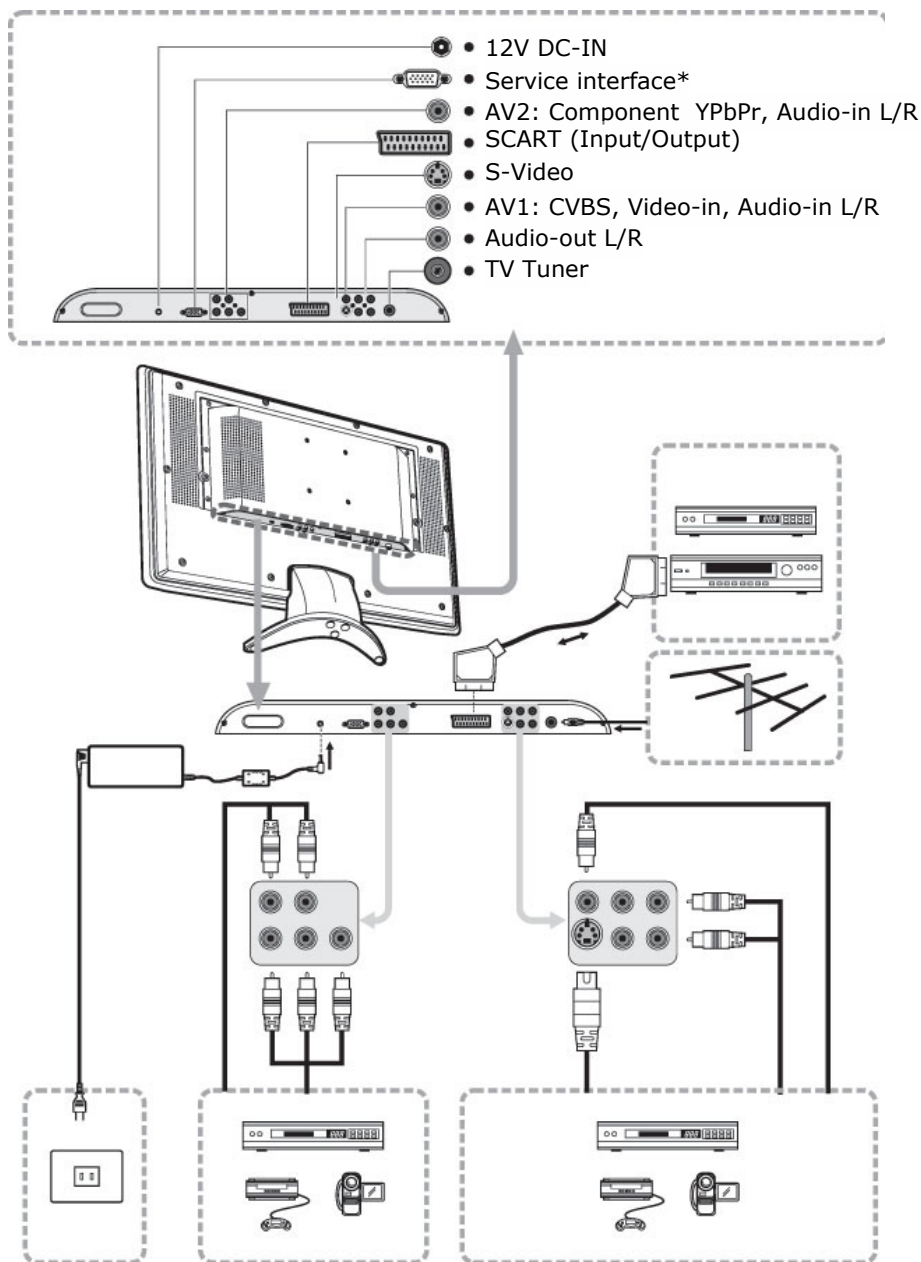
			
User's manual		Remote control & batteries (Micro / AAA X 2)	
			
Power adapter & power cord	SCART cable	Aerial cable	

3. CONNECTING EXTERNAL DEVICES

FRONT VIEW



REAR VIEW



*Service interface only intended for the service technician.

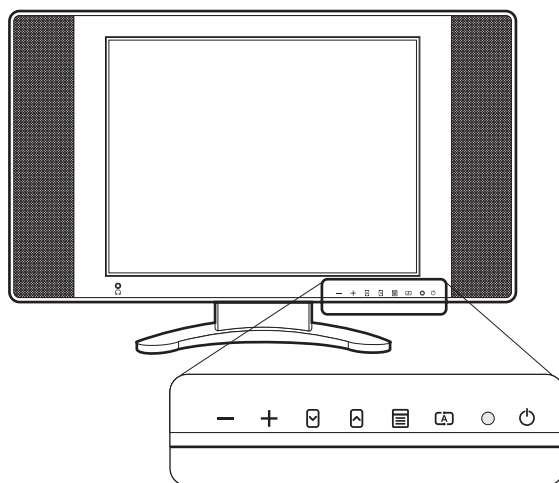
4. CONTROLS AND LOCATION

These buttons control your display's basic features, including the on-screen menu. To use the more advanced features, you must use the remote control.

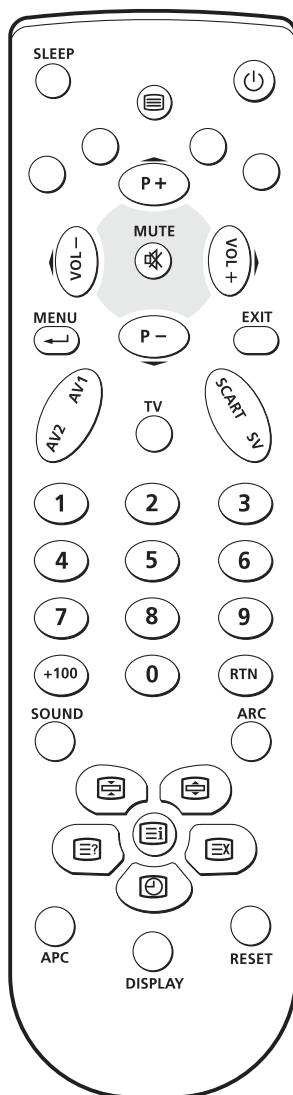
-
- | | |
|---|---|
| — | Turn down the volume. Navigation in OSD. |
| + | Turn up the volume. Navigation in OSD. |
| ⏮ | Change channels down. Navigation in OSD. |
| ⏭ | Change channels up. Navigation in OSD. |
| ☰ | Display the main menu. Confirmation of the menu. |
| Ⓐ | Select input source (TV, Video, Component (YPbPr), S-Video, SCART). |
| ⏻ | Turn on or turn off the LCD display. |
-

Power indicator

A blue indicator lights when the power is on and the indicator will be orange in standby mode. (The indicator will be off when the power is off.)

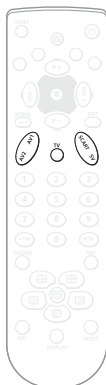


5. REMOTE CONTROL



SUMMARY OF CONTROL BUTTONS

Selecting the Signal Source



Switch to the TV mode.



Switch to the Video mode.

Switch to the Component (YPbPr) mode.



Switch to the SCART mode.

Switch to the S-Video mode.

Menu Setting



Display the main on-screen menu or enter the next menu.



Press to select the item you want to adjust in the OSD menu.



Press to decrease or increase the value in the OSD control bar.

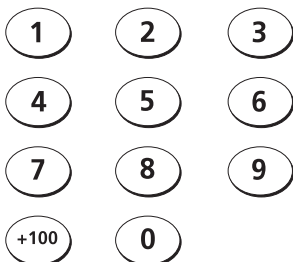


Exit from the menu.

Changing Channels



Press P- or P+ to change programs in TV mode or Teletext page in TELETEXT mode.



To select programs directly in TV mode.

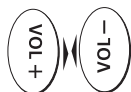


Displays the current signal source, program number and sound options.



Press to return to the previous program.

Sound Control



Press to turn up or turn down the volume.

MUTE



Press to switch the sound on or off.

SOUND



Press to choose Stereo, Bilingual or Monaural broadcasts.

Teletext Control



TELETEXT

Press to show the Teletext Service. Press again to return to TV viewing.



INDEX

Press to show the list of Teletext contents.



HOLD

Press to stop the automatic page change.



EXPAND

Press to enlarge the top half or bottom half of the Teletext page.



REVEAL

Press to display concealed information, such as solutions of riddles or a quiz.



INTERRUPT

Press to switch to TV while waiting for the next page.



SUBPAGE/TIME

Press to access to the sub-page you required.



Color-coded keys for direct access. The functions depend on the program.

Other Function



POWER key. To switch on and off.



RESET

Reset the original factory setting, such as Contrast and Color.



ARC

Changes the format.



APC

Adjusts the backlight in three levels.



SLEEP

Press to select a preset time interval for automatic power off.



When setting up programs in the TV menu, these four keys have the following functions:

Red: delete

Green: select and insert

Yellow: edit

Blue: return to menu

6. A.P.S. FIRST TIME INSTALLATION

1. After removing the LCD display packaging, ensure the product is installed in a safe and well ventilated position.
2. Insert two AAA type batteries into battery compartment on the rear of the remote control.
3. Please check, that the external 75 Ohm antenna cable, the power adapter and the corresponding power cord are connected correctly.
4. Press the **POWER** button to switch the set on.
5. The **First Setup** menu will appear when you turn on the multimedia display for the first time. Follow the steps below and use **P+ / P-**, **VOL+ / VOL-** and **MENU** buttons on your remote controller to configure **First Setup**.

First Setup (Country)

First Setup:
▶ **Country: Greatbritain**

First Setup (Language)

First Setup:
Country: Greatbritain
▶ **Language: English**

6. The preferred method at First Setup is Auto Scan. Please refer to the Manual Scan Programs section (⇒ p. 31) for detailed instructions on how to operate Manual Scan.

First Setup → AUTO SCAN



7. The system with automatically scan frequencies for available channels. Press **EXIT** to abort.
8. After First Setup is completed, the Program List will appear on the screen. You can rename, delete, and insert programs within the Program List. (For details, see "Editing Programs" p. 29.)

7. GENERAL CONTROLS & ADJUSTMENT

TURNING THE LCD DISPLAY ON AND OFF

Press the **POWER** button on the Remote Control.

SWITCHING SIGNAL SOURCE

1. Turn on the power of the connected video equipment.
2. Press the applicable button.
 - ▶ Press **TV** button to switch to TV mode.
 - ▶ Press **AV1** button to switch to Video mode.
 - ▶ Press **AV2** button to switch to Component (YPbPr) mode.
 - ▶ Press **SV** button to switch to S-Video mode.
 - ▶ Press **SCART** button to enable the system to auto detect between Scart (Video/ S-Video/ RGB) modes.

When pressing the signal source key on your LCD-TV, the device will recognize the signal source automatically.

VOLUME CONTROL

USING VOLUME CONTROL

Press **VOL-** / **VOL+** button to turn up or turn down the sound volume.

USING MUTE

At any time, you can temporarily turn off the sound by pressing the **MUTE** button.

1. Press the **MUTE** button and the sound cuts off.
2. Press the **MUTE** again or **VOL-** / **VOL+** button to turn the sound back to the previous level.



Note: The mute function is automatically turned off if **VOL-** / **VOL+** is pressed.

SETTING THE SLEEP TIMER

You can set the Sleep Timer to automatically turn off the TV view of LCD display.

1. Press the **SLEEP** button to display the Sleep Timer screen.
2. Press the **SLEEP** button repeatedly to change the sleep time (in minutes).

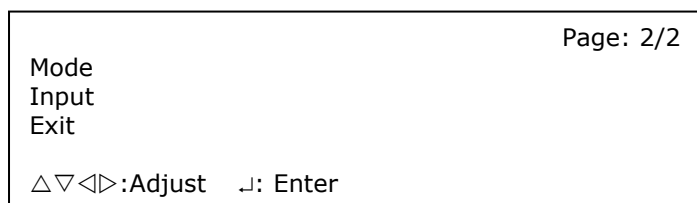
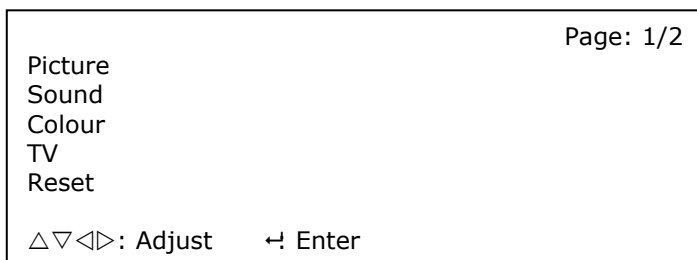
The time can be set to 10-minute increments from 10 minutes to 120 minutes.



Note: The Sleep Timer screen automatically disappears in 10 seconds.

VIEWING THE MENUS AND ON-SCREEN DISPLAYS

1. With the power on, press the **MENU** button. The main menu appears on the screen.



2. Use the **P+ / P-** button to select one of the menu options, and then press the **MENU** button to access to the Sub-menu.
3. Press the **MENU** button to return to the previous screen.

Note: The menu varies with which input source is selected.

CONTRAST AND BRIGHTNESS SETTINGS

You may need to perform separate adjustments for brightness and contrast for the different video modes.

1. Press the **MENU** button to display the main menu.
2. Press the **P+ / P-** button to move cursor to **PICTURE**.
3. Press the **MENU** key to confirm the setting.

To adjust **brightness**, select the menu item using the **P+ / P-** keys. Set the desired value using the **VOL+ / VOL-** keys.

To adjust **contrast**, select the menu item using the **P+ / P-** keys. Set the desired value using the **VOL+ / VOL-** keys.

SETTING CHILD LOCK

This function locks the LCD-TV to prevent unauthorized access.

1. Press the **MENU** key to open the main menu.
2. Press the **P+ / P-** button to select **MODE** and confirm your selection with the **MENU** key.
3. Go to the function **Child Lock** using the **P+ / P-** keys.
4. Press the **MENU** key again.
5. Enter a 4 digit PIN with the remote control.
6. Confirm your PIN by entering it again.

Your LCD TV is now locked by the child lock.

Should you forget your PIN, do the following and use the keys on the main device only:

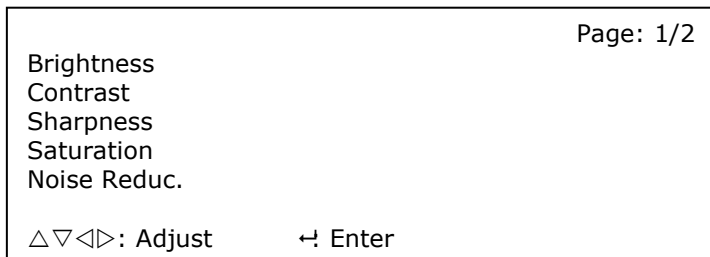
1. Unplug the power adapter
2. Press and hold the keys **VOL-** and **POWER simultaneously**.
3. Plug in the power adapter.

The device is now reset to factory default settings. The initial setup must be performed again.

MENU OVERVIEW

Press the **MENU** key while the device is switched on. The following options appear on your screen.

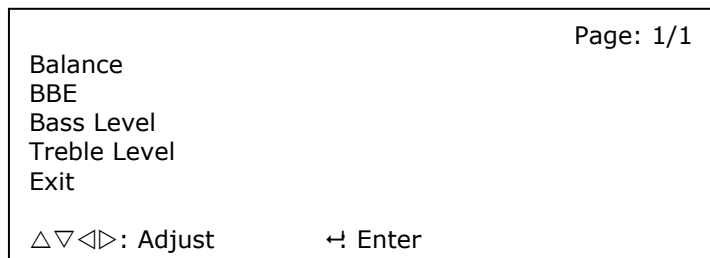
PICTURE



You can adjust several screen settings in this menu, including BRIGHTNESS, CONTRAST, SHARPNESS and COLOR SATURATION. You can activate NOISE REDUCTION to suppress picture distortion.

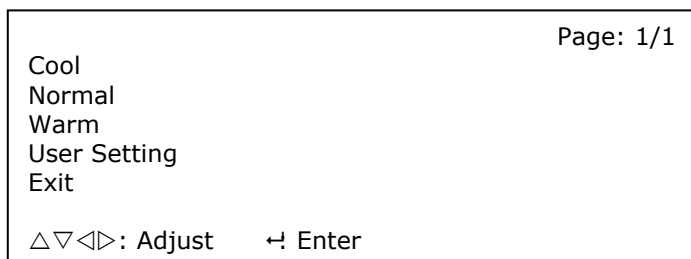
To go to page 2, please press the keys P+ / P-. There you will find the menu item Exit, which you can select by pressing MENU.

SOUND



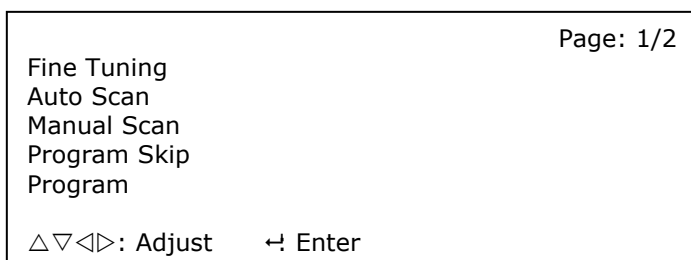
You can adjust several audio settings in this menu.

COLOUR



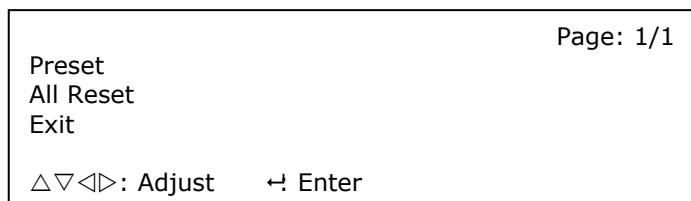
In the color menu the color temperature can be adjusted to **cool**, **normal**, **warm** or **user settings**. (depending on the ambient lighting conditions)

TV



In the TV menu you can start the automatic and the manual channel scan. You can also edit the program list here. To go to page 2, please press the keys **P+** / **P-**. There you will find the menu item Exit, which you can select by pressing **MENU**.

RESET



In the **Preset** menu you can reset the picture and sound settings. In the **All Reset** menu you can reset the menu to the factory default settings. After starting up again the initial setup screen appears. All prior modifications are irreversibly lost.

MODE

Overview Transparence Child Lock Language Decoder	Page: 1/2
△▽◀▶: Adjust ↵ Enter	

OSD Time Exit	Page: 2/2
△▽◀▶: Adjust ↵ Enter	

The mode menu offers access to special settings like **OVERVIEW**, **TRANSPARENCE**, **CHILD LOCK**, **LANGUAGE**, **DECODER** and **OSD Time**.

INPUT

Video S-Video SCART YPbPr Exit	Page: 1/1
△▽◀▶: Adjust ↵ Enter	

You can select your signal source in the input menu using the P+/P- keys. Confirm your selection with the MENU key. When selecting SCART connection you may choose between different types (Y/C, CVBS, RGB or AUTO) using the VOL+/VOL- keys. Auto allows for automatic type recognition.

8. TV MODE ADJUSTMENT

1. Select "TV" mode as signal source using the TV key on the remote control.
2. Press the **Menu** key and select **TV** on the screen menu.

EDITING PROGRAMS

1. Select the menu item **PROGRAMS** on the TV menu and confirm your selection with the **MENU** key.

Programs

▷	
--	---

☐ Delete

☐ Mark

☐ Edit

☐ Skip

On this screen you can edit, insert, skip or delete programs.

CHANGE OR EDIT NAMES

1. Move to the program number you want to rename or edit name by pressing **P+ / P-** or **VOL- / VOL+** button.
2. Press the **YELLOW** button.
3. Press **P+ / P-** button repeatedly to select a letter, and then press **VOL- / VOL+** button to select the position. (Each program name could be edited with 5 characters)
4. Press **YELLOW** button again to store.

INSERT PROGRAM NAMES

1. Use the keys **P+ / P-** or **VOL- / VOL+** to select the program to be inserted.
2. Press the **GREEN** button.
3. Use the keys **P+ / P-** or **VOL- / VOL+** to select the position, where the program shall be inserted.
4. Press the **GREEN** key again to move the program.
5. Press the **BLUE** key to exit this screen.

DELETE A PROGRAM

1. Move to the program number you want to delete by pressing **P+ / P-** button.
2. Press the **RED** button.
3. Press **RED** button again to delete. The corresponding channel will be deleted and all the other channels below this program number will be moved one program number up.

MANUAL SCAN PROGRAMS

You can limit the search interval for manual scanning. Please proceed as follows:

1. Select the menu item **Manual Scan** in the TV menu.
2. Confirm your selection with **Yes**.

Manual Scan		
▷Programs	034	
Frequency		
System	PAL / SECAM	
Save	No	Yes

3. Enter the frequency by using the **key pad** or the **VOL-/VOL+** button.
4. Select between **PAL** or **SECAM**.
5. If you wish to save the program select **YES**. The program will be entered into the next free channel.

Note: Press the EXIT key on the remote control to close this window.

9. TELETEXT

Teletext is a free service broadcast by most TV stations which gives up-to-the-minute information news, weather, television program, share prices, subtitles, and many other topics.

TO OPERATE TELETEXT

1. Select a TV station on which Teletext is being transmitted.
2. Press the **TELETEXT** button once to appear the Teletext screen.
Press the **TELETEXT** button again to switch off Teletext.
The previous program reappears.

TELETEXT PAGE SELECTION

1. Enter the required Teletext page as a three digit numbers. The selected page number is displayed at the top left corner of the screen. The Teletext page counter searches until the selected page number is located, so that the desired page is displayed on the screen.
2. The **P+ / P-** button can be used to select the preceding or following page.
3. Fastext movement by the **4 colored buttons**.
Four subject-heading pages can be selected quickly by pressing the corresponding colored button **Red**, **Green**, **Yellow**, or **Blue** on the remote control handset.

USEFUL FEATURES FOR TELETEXT



INDEX

- * Press this button to select the index page that displays the list of Teletext contents.



HOLD

The Teletext page you have selected may contain more information than what is on the screen; the rest of the information will be displayed after a period of time on a sub-page.

- * Press **HOLD** button to stop the automatic page change.
 - The **HOLD** symbol will be displayed at the top left-hand corner on the screen and the automatic page change will be stopped.
- * Press **HOLD** button again to continue.



INTERRUPT

In the Teletext mode, pressing **INTERRUPT** button will switch the screen to the TV mode while waiting for the next text page.

- * Select required page number in Teletext mode.
- * Press **INTERRUPT** button to switch to TV mode while waiting for the text page. The upper and lower row of the videotext page information is displayed for 6 seconds, before it disappears.
- * When the required text page is found, the page number is displayed in a black box in the upper left corner.
- * Press **INTERRUPT** button again to revert to Teletext mode.



REVEAL

- * Press this button once to display concealed information, such as solutions of riddles, puzzles, or a quiz.
- * Press this button again to conceal the revealed answers.



EXPAND

Select double height text.

- * Press this button to enlarge the top half of the page.
- * Press this button again to enlarge the bottom half of the page.
- * Press this button once more to return to the normal display.



SUB-PAGE / TIME

In Teletext mode, sub pages are subsections of long Teletext pages that can only be displayed on the screen one section at a time.

- * Select the required Teletext page. (e.g. 524)
- * Press **SUB-PAGE** button. "S0000" will be displayed.
- * Select the required sub page number by pressing four digit buttons (e.g. 0001).
- * The Teletext sub page number will be displayed on the lower right corner of the screen when the selected page is found.
- * Press **SUB-PAGE** button again to return to normal page sequence.

In TV mode, press this button to display the time.

- * While watching a TV program with Teletext transmission press **TIME** button. The current time information will be displayed on the upper right corner of the screen.
- * As soon as you press the **TIME** key again, the time display will vanish again, but it will otherwise disappear automatically after about 6 seconds.

10. TROUBLESHOOTING

Many times, problems have simple causes. We would like to give you some tips to solve some common problems. Should these tips not help, please call us!

There is no picture or sound.

- ▶ Make sure the AC adapter is properly inserted in the power outlet.
- ▶ Make sure the input mode is set to correctly.
- ▶ Make sure the main power switch of the main unit is on.

There is no picture. There is no picture from AV.

- ▶ Make sure the Contrast/Brightness is properly adjusted.
- ▶ Make sure all external devices are connected properly.

There is no sound.

- ▶ Make sure the volume is not set to minimum.
- ▶ Make sure the sound is not set to mute.
- ▶ Make sure that headphones are not connected.
- ▶ When using the connectors AV1, AV2 or S-Video please check, that an audio cable is also connected.

There is no picture or sound, just noise.

- ▶ The reception may be weak.
- ▶ Make sure the aerial is not disconnected.

Picture is not clear.

- ▶ The reception may be weak.
- ▶ Make sure the aerial is not disconnected.

Picture is too bright.

- ▶ Check the **APC** function setting.
- ▶ Check Contrast/Brightness adjustment.

The picture is too dark.

- ▶ Check if the **APC** button is set to "Dark".
- ▶ Check Contrast/Brightness adjustment.

Remote control does not work.

- ▶ Check the batteries in the remote control are not flat.
- ▶ Make sure the remote sensor window is not under strong lighting.

The picture is not sharp.

- ▶ The reception may be weak.
- ▶ Make sure the aerial is not disconnected.

The picture jitters.

- ▶ The reception may be weak.
- ▶ Make sure the aerial is not disconnected.

The picture is doubled or tripled.

- ▶ Make sure the aerial is facing the right direction.
- ▶ There may be reflected electric waves from mountains or buildings.

The picture is spotted.

- ▶ There may be interference from automobiles, trains, high voltage lines, neon light, etc.
- ▶ There may be interference between the antenna cable and power cable. Try moving them further apart.

There are stripes on the screen or colors fade.

- ▶ Is the unit receiving interference from other devices?
Transmission antennas of radio broadcasting station and transmission antennas of amateur radio and cellular phones may also cause interference.
- ▶ Place the unit as far apart as possible from device that may cause possible interference.

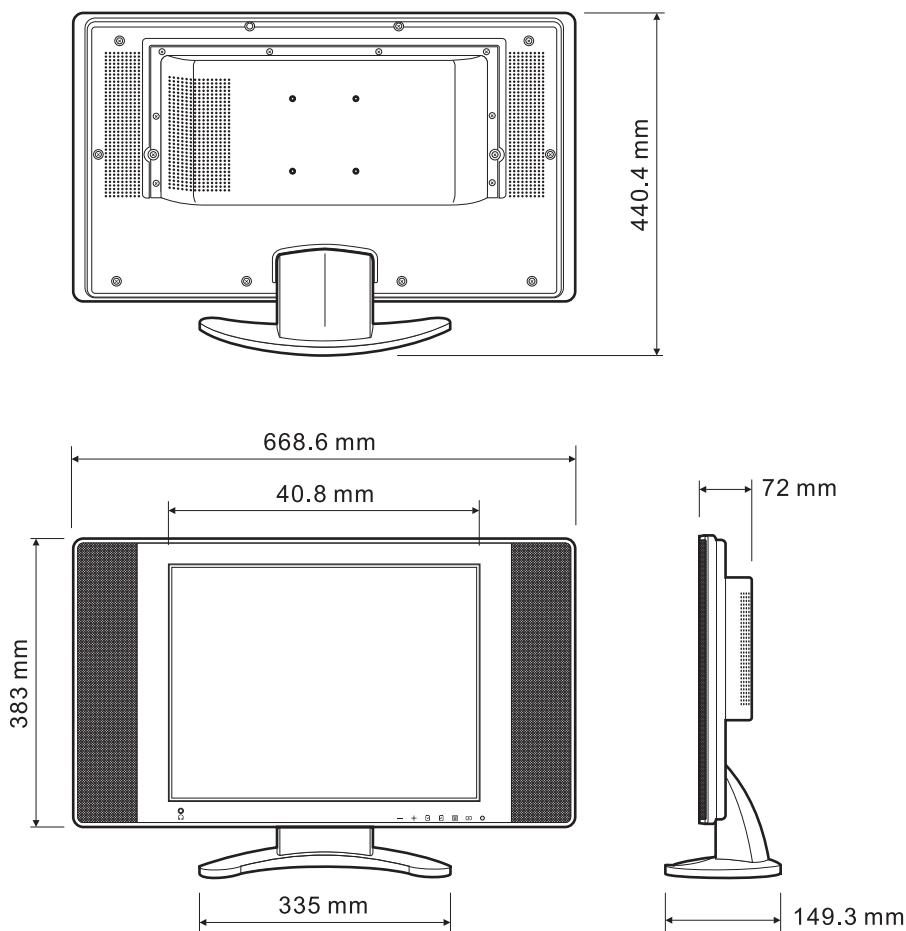
The basic settings are not correct anymore (color and tone).

- ▶ Press the RESET key on the remote control to return to the basic settings.

You forgot the child lock PIN.

- ▶ Follow the instructions on page 27 to perform a reset.

11. DIMENSIONS



12. SPECIFICATIONS

Items	Specification
Display	
Screen size	20.1" TFT (Thin-Film Transistor) LCD panel
Resolution	640x480 (VGA)
Aspect ratio	4:3
Display area (HxV)	408 x 306 mm
Pixel pitch	RGB 3x0,2125 (H) x 0,6375 (V)
Display colours	16,7 Mio. colours
Contrast ratio	500:1 (typ.)
Brightness	500 Cd/m ³ (typ.)
View Angle (H, V)	± 80°, ± 70°
Response time	16ms (typ.)
TV Function	
TV tuning system	B/G, D/K, I and L
Teletext	Yes
Colour system	PAL/SECAM
Video	
SCART In (RGB/Y/C or CVBS) Out (CVBS)	21-pin (RGB, Y/C or CVBS) x 1
Video (In)	CVBS (composite) x 1
	YPbPr (component) x 1
	S-video x 1
Audio	
Audio (In)	Audio L/R x 1
Audio (Out)	Audio L/R x 1
Speakers	Integrated, 3W x 2
Headphones	3.5mm mini stereo port x 1
Power	
Power adaptor (Li Shin 0218B1265)	AC 100-240V~, 60/50Hz 12 V / 65 W
Power consumption	< 65W
Dimension and Weight	
Dimension (W x H x D)	668 x 383, x 72 mm (without stand)
	668 x 440 x 149 mm (with stand)
Weight	8.6 kg (without accessories)
Accessories	
User's manual, remote control, batteries (AAAx2), power adaptor, power cord, SCART cable, aerial cable	

WARRANTY

We warrant to our customers that this product is free from defects in materials and workmanship as follows: for a determined period from the date of original purchase, defective parts or a defective product returned to a repair facility or an Authorized Service Facility ("ASF") for such product, as applicable, and proven to be defective upon inspection, will be exchanged for new or comparable rebuilt parts, or a refurbished product, as determined by the repair facility or the ASF. Limited warranty repair or replacement shall not extend the original limited warranty period of the defective product. This limited warranty does not cover any supplies or accessories, including but not limited to: software, blank media, user-installed drives, etc.

EXCLUSIONS: this limited warranty does not apply, and you will have no remedy hereunder with respect to (a) products that have been modified, opened, repaired or otherwise altered, except by an ASF, (b) products that have been damaged or destroyed after delivery to the customer, (c) any third party software, interfaces, parts, supplies, peripherals or other products or any defects resulting from use of the product in connection with such third party products, (d) defects resulting from improper or inadequate maintenance, calibration or site preparation, (e) defects resulting from any misuse, abuse, accident, neglect, negligence or any use other than in accordance with the handling or operating instructions provided, (f) defects resulting from exposure to unusual physical or electrical stress or from any operation other than in accordance with the published environmental specifications for the product.

TO THE EXTENT ALLOWED UNDER APPLICABLE LAW, THE ABOVE WARRANTIES ARE EXCLUSIVE AND NO OTHER WARRANTY OR CONDITION, WHETHER WRITTEN OR ORAL, IS EXPRESSED OR IMPLIED AND WE SPECIFICALLY DISCLAIM ANY IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND NO IMPLIED WARRANTY APPLIES TO THE PRODUCT AFTER THE APPLICABLE PERIOD OF THE EXPRESS LIMITED WARRANTY STATED ABOVE. Some countries, states or provinces do not allow exclusions or limitations on the duration of an implied warranty, so the above limitation or exclusion might not apply to you. This limited warranty gives you specific legal rights and you might also have other rights that vary from country to country, state to state, or province to province.

Our limited warranty is valid in any country or locality where we have a support presence for this product and where we have marketed this product. The level of warranty service you receive may vary according to local standards. We will not alter form, fit or function of the product to make it operate in a country for which it was never intended to function.

TO THE EXTENT ALLOWED UNDER APPLICABLE LAW, THE REMEDIES IN THIS LIMITED WARRANTY STATEMENT ARE YOUR SOLE AND EXCLUSIVE REMEDIES. EXCEPT AS INDICATED ABOVE, IN NO EVENT WILL OUR COMPANY OR ITS SUPPLIERS BE LIABLE FOR LOSS OF DATA OR FOR INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFIT OR DATA), OR OTHER DAMAGE, WHETHER BASED IN CONTRACT, TORT, OR OTHERWISE. IN NO EVENT SHALL RECOVERY OF ANY KIND AGAINST OUR COMPANY BE GREATER IN AMOUNT THAN THE PURCHASE PRICE OF THE PRODUCT SOLD BY US WHICH CAUSED THE ALLEGED DAMAGE. WITHOUT LIMITING THE FOREGOING, YOU ASSUME ALL RISK AND LIABILITY FOR LOSS, DAMAGE OR INJURY TO YOU AND YOUR PROPERTY AND TO OTHERS AND THEIR PROPERTY ARISING OUT OF USE OR MISUSE OF, OR INABILITY TO USE THE PRODUCT NOT CAUSED DIRECTLY BY THE NEGLIGENCE OF

OUR COMPANY. Some countries, states or provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

THE WARRANTY TERMS CONTAINED IN THIS STATEMENT, EXCEPT AS LAWFULLY PERMITTED, DO NOT EXCLUDE, RESTRICT OR MODIFY AND ARE IN ADDITION TO THE MANDATORY STATUTORY RIGHTS APPLICABLE TO THE SALE OF THIS PRODUCT TO YOU.

Please note the following:

Be sure to keep your purchase receipt in a safe place. Our company, at its option, may require a copy of the receipt to validate the warranty period effective date (i.e. date of purchase). Warranty liability only applies to material or factory faults. It does not apply to damage due to breakage, for example, a crack in the housing. Our service includes unit exchange or send-in repair:

Unit Exchange

In locations where Unit Exchange is available, we will send you a replacement unit. You must return the defective unit to our company (using the shipping carton that the new one came in.)

Send-In Repairs

In locations where Send-In Repair Service is available, repair service can be obtained by shipping your unit to the Repair Center. The unit will be repaired and returned to you.

For either Unit Exchange or Send-In Repairs, you must have an authorized RMA number from our support before shipping your defective product.

Replacement products may be either new or equivalent in performance to new. Replacement or repaired products may contain remanufactured parts equivalent to new in performance or may have been subject to incidental use.

Out-of-Warranty Support

In addition to providing free technical support during the warranty period, We are also available to support your product after the warranty period has ended. This out-of-warranty support will be provided on a fee basis.

PIXEL ERRORS WITH LCD TVs

An active matrix LCD TV with a resolution of 640 x 480 pixel consisting of three sub pixel (red, green, blue), requires a total of about 922,000 directly addressable transistors. Because of this very high number of transistors and the related very complex manufacturing process, some defects or faulty addressing of pixel or sub pixel might occur.

For such a display the following pixel errors are specified:

Item		Acceptable Number
Bright Sub Pixel	1	$N \leq 2$
	2 two next to each other	$N \leq 1$
	3 or more next to each other	$N \leq 0$
Distance	Minimal distance between bright sub pixel	$L \geq 5 \text{ mm}$
Dark Sub Pixel	1	$N \leq 5$
	2 next to each other	$N \leq 2$
	3 or more next to each other	$N \leq 0$
Distance	Minimal distance between dark sub pixel	$L \geq 5 \text{ mm}$
Total number of bright and dark sub pixel		$N \leq 5$

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